

ABSTRACT OF THE DISCLOSURE

A voter V_i encrypts his vote content v_i with a public key k_{PC} of a counter C , then concatenates the encrypted vote content x_i with a tag t_i to obtain a ballot z_i , then randomizes it with a random number r_i to create a preprocessed text e_i , and sends it and a signature s_i therefor to an election administrator A . The administrator A generates a blind signature d_i for the preprocessed text e_i and sends it back to the voter V_i . The voter V_i excludes the influence of the random number r_i from the blind signature d_i to obtain administrator signature y_i , and sends vote data $\langle z_i, y_i \rangle$ to a counter C . The counter C verifies the validity of the administrator signature y_i and, if valid, generates and publishes a vote list containing the data $\langle z_i, y_i \rangle$ to the voter V_i . The voter V_i checks the vote list to make sure that it contains the data $\langle z_i, y_i \rangle$ with his tag t_i held in the ballot z_i . The counter C decrypts the encrypted vote content x_i in the ballot z_i to obtain the vote content v_i , and counts the number of votes polled for each candidate.